March 19, 2003

Re: Whiting Clean Energy, Inc. 089-15985-00449

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

CONSTRUCTION PERMIT
for Prevention of Significant Deterioration
OFFICE OF AIR MANAGEMENT

Whiting Clean Energy, Inc.
2155 Standard Avenue
Whiting, Indiana 46394

(herein known as the Permittee) is hereby authorized to construct the facilities listed in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1.1, 326 IAC 2-2, 326 IAC 2-3, 326 IAC 2-5.1, 40 CFR 52.780 and 40 CFR 124 with conditions listed on the attached pages.

Construction Permit No.: CP-089-11194-00449	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Permit No.: CP-089-15985-00449	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: March 19, 2003

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information

The Permittee owns and operates an industrial steam and electric power cogeneration plant.

Responsible Official:	Thomas L. Tarpley
Source Address:	2155 Standard Avenue, Whiting, Indiana 46394
Mailing Address:	8407 Virginia Street, Merrillville, Indiana 46410
SIC Code:	4911
County Location:	Lake
County Status:	Nonattainment for PM_{10}, SO_2, and ozone (NOx and VOC)
Source Status:	Major PSD Source for PM, NO_2, and CO Major Emission Offset Source for PM_{10}, and ozone (NOx and VOC) One of the 28 Listed Categories (Fossil Fuel-Fired Steam Electric Plant of more than 250 MMBtu per hour)

A.2 Emission Units and Pollution Control Equipment Summary

This new source for Whiting Clean Energy, Inc., relates to the construction and operation of an industrial steam and electric power cogeneration plant consisting of the following equipment:

(a) Two Combustion Turbines:

Heat Input Capacity:	1,735 MMBtu per hour (HHV) @ ISO conditions, each
Electric Generating Capacity:	166 MWe @ ISO conditions, each
Fuel Source:	Natural Gas
Control Technology:	Dry Low-NOx Burners
Stack ID:	CT 1 exhausts through HRSG 1 to Stack 1 CT 2 exhausts through HRSG 2 to Stack 2

(b) Two Supplementary Heat Recovery Steam Generators with Two Duct Burners:

Steam Generating Capacity:	1300 psig
Duct Burner Heat Input Capacity:	821 MMBtu per hour (HHV), each
Fuel Source:	Natural Gas
Control Technology:	Low NOx Burners and Selective Catalytic Reduction (SCR) System for NOx Control
Steam Production Capacity:	580,000 pounds per hour, each, without duct burners 1,188,000 pounds per hour, each, with duct burners

(c) One Condensing Steam Turbine Generator:

Electric Generating Capacity: 213 MWe @ 1,600,000 pounds per hour steam

(d) Induced Draft Cooling Tower:

System Technology: 5 cycle, 10 cell, induced draft cooling tower
Water Circulation Rate: 160,000 gallons per minute non-contact cooling water
Control Technology: Mist Eliminator for PM Control

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

(a) This stationary source will be required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because it is a major source as defined in 326 IAC 2-7-1(22).

(b) This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

A.4 Acid Rain Permit Applicability [40 CFR 72.30]

(a) This stationary source shall be required to have a Phase II, Acid Rain permit by 40 CFR 72.30 (Applicability) because the combustion turbines are new units under 40 CR 72.6.

(b) The source cannot operate the combustion units until their Phase II, Acid Rain permit has been issued.

Section B Construction Conditions

B.1 General Construction Conditions

(a) This permit is based on the data and information submitted by the Permittee. Any change in the design or operation of the plant that could increase emissions or change applicable air pollution control requirements may require that the permit be amended in accordance with 326 IAC 2 as set forth in condition B.4 of this permit.

(b) This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

(c) Notwithstanding Construction Condition B.4, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

(d) When the facility is constructed and placed into commercial operation, the operation conditions required by Section C and Section D shall be met.

B.2 Effective Date of the Permit

Pursuant to 40 CFR Parts 124.15, 124.19 and 124.20, the effective date of this permit will be thirty (30) days from its issuance if comments are received. Three (3) days shall be added to the thirty (30) day period, if service of notice is by mail. If no public comments are received, then the permit shall be effective immediately upon issuance.

B.3 Permit Revocation

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), this permit may be revoked if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 First Time Operation Permit

This document shall also become a first-time operation permit pursuant to 326 IAC 2-5.1-3 (Permits) when, prior to start of operation, the following requirements are met:

(a) Any modifications required by 326 IAC 2-1.1 and 326 IAC 2-7-10.5 as a result of a change in the design or operation of emissions units described by this permit have been obtained prior to obtaining an Operation Permit Validation Letter.

(b) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, IN 46206-6015

verifying that the facilities were constructed as proposed in the application and subsequently received approvals from IDEM, OAM.

(1) The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM, OAM if the

provisions of 40 CFR Parts 72-80 (Acid Rain Program) are not applicable to such facilities.

(2) If the facilities are subject to the provisions of 40 CFR Parts 72-80 (Acid Rain Program), then the proper Phase II, Acid Rain permit must be issued to such facilities before operation can commence.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(e) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

(f) Pursuant to 326 IAC 2-7-4, the Permittee shall apply for a Title V operating permit within twelve (12) months after the source becomes subject to Title V. This 12-month period starts at the postmarked submission date of the Affidavit of Construction. If the construction is completed in phases, the 12-month period starts at the postmarked submission date of the Affidavit of Construction that triggers the Title V applicability. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.

B.5 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.7 and 60.8, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

(a) Commencement of construction date (no later than 30 days after such date);

(b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

(c) Actual start-up date (within 15 days after such date); and

(d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to IDEM, OAM. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

General Operation Conditions

C.1 General Operation Conditions

(a) This permit is based on the data and information supplied by the Permittee. The Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The Permittee shall comply with all applicable provisions of IC 13 and 326 IAC.

(b) After obtaining the approval to operate in accordance with Condition B.4 of this permit, the Permittee shall subsequently obtain necessary approvals as required by 326 IAC 2-1.1 and 326 IAC 2-7-10.5.

C.2 Transfer of Permit

(a) In the event that ownership of this industrial steam and electric power co-generation facility is changed, the Permittee shall notify:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within thirty (30) days of the change. Notification shall include the date or proposed date of said change.

(b) A written notification shall be sufficient to transfer the permit from the current owner to the new owner.

(c) IDEM, OAM shall reserve the right to issue a new permit.

C.3 Permit Revocation

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit;

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit;

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit;

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode; or

(e) For any cause which establishes in the judgment of IDEM, OAM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1.1 (Permit Review Rules).

C.4 Availability of Permit

Pursuant to 326 IAC 2-5.1-3(e)(4), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by IDEM, OAM, or other public official having jurisdiction.

C.5 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and implement Preventive Maintenance Plans (PMPs) upon commercial operation. Commercial operation is defined as the date in which operations produce steam or electricity for sale. The PMPs are comprised of:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any emission limitation.

(c) PMPs shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.6 Malfunction Condition

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to IDEM, OAM or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which results in an exceedance of the limits of this permit that lasts more than one (1) hour, said condition shall be reported to IDEM, OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected

duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Emission Limitations and Standards

C.7 Opacity Emissions

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Operation of Equipment [326 IAC 2-5.1-3]

Except during periods of startup and shutdown or as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that an emission unit vented to the control equipment is in operation.

C.10 Stack Height Provisions

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

Testing Requirements

C.11 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM. A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Monitoring Requirements

C.12 Compliance Monitoring [326 IAC 2-1.1-11 and 326 IAC 3-5]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements shall be implemented within 60 days of commercial operation, as defined in Condition C.5, but no later than 180 days after initial startup, except as provided elsewhere in this approval.

C.13 Maintenance of Monitoring Equipment

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this approval until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(1) In the event of nitrogen oxide monitor failure, the Permittee shall maintain ammonia feed at the rate at which it was being fed prior to the monitor malfunction. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within 48 hours of the time of the initial monitor failure.

(2) In the event of oxygen monitor failure, the Permittee shall maintain the NOx concentration at the same level which it was being held prior to the monitor malfunction. If the Permittee is unable to repair the monitoring equipment, a backup analyzer shall be installed within 48 hours of the initial monitor failure.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

(c) The Permittee is not required to operate the continuous emissions monitor when its associated production equipment is not in operation.

C.14 Monitoring Methods

Any monitoring or testing performed to meet the requirements of this permit shall be performed, according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.15 Visible Emission Determination

Pursuant to 326 IAC 5, 326 IAC 6, and 326 IAC 12, visible emissions from the source shall be measured using one or both of the following procedures to demonstrate compliance with the opacity limitations:

(a) visible emissions observations performed in accordance with the applicable procedures under 326 IAC 5-1-4 and 40 CFR 60, Appendix A, Method 9; or

(b) continuous opacity monitoring data recorded in accordance with the applicable procedures under 40 CFR 60, Appendix B, Performance Specification 1 and 326 IAC 3-1.1.

A violation determined by one of the above methods shall not be refuted by the other method.

Corrective Actions and Response Steps

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRPs shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The Permittee shall prepare and implement the CRPs upon commercial operation, as defined in Condition C.5. The CRPs are comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within “normal” parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

C.18 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation.

(c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

Record Keeping and Reporting Requirements

C.19 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.20 Monitoring Data Availability

(a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(1) At its discretion, IDEM, OAM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(2) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Recordkeeping Requirements

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available within a reasonable time upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented upon commercial operation.

C.22 General Reporting Requirements

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.

(d) The first report shall cover the period commencing on the date of commercial operation and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

(a) Two Combustion Turbines (CTs):

Heat Input Capacity:	1,735 MMBtu per hour (HHV) @ ISO conditions, each
Electric Generating Capacity:	166 MWe @ ISO conditions, each
Fuel Source:	Natural Gas
Control Technology:	Dry Low-NOx Burners and Selective Catalytic Reduction
Stack ID:	CT 1 exhausts through HRSG 1 to Stack 1 CT 2 exhausts through HRSG 2 to Stack 2

(b) Two Supplementary Heat Recovery Steam Generators (HRSGs) with Two Duct Burners:

Steam Generating Capacity:	1300 psig
Duct Burner Heat Input Capacity:	821 MMBtu per hour (HHV), each
Fuel Source:	Natural Gas
Control Technology:	Low NOx Burners and Selective Catalytic Reduction
Steam Production Capacity:	580,000 pounds per hour, each, without duct burners 1,188,000 pounds per hour, each, with duct burners

(c) One Condensing Steam Turbine Generator:

Electric Generating Capacity:	213 MWe @ 1,600,000 pounds per hour steam

(d) Induced Draft Cooling Tower:

System Technology:	5 cycle, 10 cell, induced draft cooling tower
Water Circulation Rate:	160,000 gallons per minute non-contact cooling water
Control Technology:	Mist Eliminator

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate Matter (PM and PM_{10}) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), the total PM emissions from each combustion turbine stack shall not exceed 0.0045 pounds per MMBtu which is equivalent to 7.8 pounds per hour.

(b) Pursuant to 326 IAC 2-2 (PSD Requirements), the total PM emissions from each combustion turbine stack, when its associated duct burner is operating, shall not exceed 0.0045 pounds per MMBtu which is equivalent to 11.5 pounds per hour.

(c) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Da (New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units), each steam generating unit shall comply to the following:

(1) The opacity from each combustion turbine stack, when its associated duct burner is operating, shall not exceed 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent. The opacity standards apply at all times, except during periods of startup, shutdown or malfunction. This satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(2) The PM emissions from each duct burner shall not exceed 0.03 pounds per MMBtu heat input.

(d) Pursuant to 326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset Requirements), the opacity from each combustion turbine stack shall not exceed 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent. The opacity standards apply at all times, except during periods of startup, shutdown or malfunction. This satisfies the opacity limitations required by 326 IAC 5-1 (Opacity Limitations).

(e) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), each steam generating unit shall comply with the following:

(1) Pursuant to 326 IAC 6-1-2(a), the PM emissions from each combustion turbine stack shall not exceed 0.03 grains per dry standard cubic feet.

(2) Pursuant to 326 IAC 6-1-2(b)(5), PM emissions associated with the duct burner from each combustion turbine stack, shall not exceed 0.01 grains per dry standard cubic feet.

(f) To avoid the requirements of 326 IAC 2-3 (Emission Offset Requirements) for PM_{10}:

(1) the PM_{10} (filterable + condensible) emissions from each combustion turbine stack, when its associated duct burner is operating, shall not exceed 11.5 pounds per hour; and

(2) the combined natural gas fuel usage from the duct burners shall not exceed 8,052 MMSCF per year, based on a 12 consecutive month period.

D.1.2 Nitrogen Oxides (NO_X) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset Requirements), each combustion turbine/steam generating unit shall comply with the following:

(1) During normal operation (50 percent load or more), the NO_X emissions from each combustion turbine stack shall not exceed 3.0 ppmvd at 15 percent oxygen, based on a 3-hour rolling average, which is equivalent to 19.5 pounds NO_X per hour at ISO conditions.

(2) During normal operation (50 percent load or more), the NO_X emissions from each combustion turbine stack, when its associated duct burner is operating, shall not exceed 3.0 ppmvd at 15 percent oxygen, based on a 3-hour rolling average, which is equivalent to 38.0 pounds NO_X per hour at ISO conditions.

(3) During periods of startups or shutdowns (less than 50 percent load), the NOx emissions from each combustion turbine stack shall not exceed 70 ppmvd at 15 percent oxygen. The startup or shutdown period shall not exceed two (2) hours. The duct burners shall not be operated until normal operation begins.

(4) Each combustion turbine shall be equipped with dry low-NO_X burners and operated using good combustion practices to control NO_X emissions.

(5) A selective catalytic reduction (SCR) system shall be installed and operated at all times, except during periods of startup/shutdown, to control NO_X emissions.

(b) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Da (NSPS for Electric Utility Steam Generating Units), each duct burner shall not exceed 1.6 pounds/MW-hr gross energy output on a 30-day rolling average.

(c) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart GG (NSPS for Stationary Gas Turbines), the NOx emissions from each combustion turbine shall not exceed the following:

STD = 0.0075 x ((14.4)/Y) + F

where: STD = Allowable NOx percent by volume @ 15% O_2, dry basis
Y = Heat Rate not to exceed 14.4 kilojoules per watt-hr
F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

(d) The Permittee may use NOx CEM data to demonstrate compliance with 40 CFR Part 60, Subpart Da, and (a) and (c) of this Section. The performance test for the NOx CEM must be taken after startup, as required under 40 CFR 60.8, not during startup.

(e) To demonstrate compliance with (b) of this Section, the Permittee shall use continuous fuel flowmeters following the appropriate measurement procedures specified in Appendix D to Part 75. The hourly NOx mass rate will be calculated by equation three (3) of 40 CFR 60.46a (k)(2)(iv).

(1) The compliance provision under 40 CFR 60.46a(k)(3) requires measurement of NOx emissions at a point where emissions from the Duct Burners combine with the emissions from the Combustion Turbines, connected to a stack. This will allow measurement of NOx from the entire system.

(2) The equation in Appendix D to Part 72 shall be used to calculate the actual gross electrical output, using the actual heat input instead of the maximum design heat input. The hourly emissions (lb/hr) from the NOx CEM will be divided by the actual gross electrical output to yield values in terms of the standard (lb NOx/Mwh). The performance test t for the NOx CEM must be conducted after startup, as required under 40 CFR Section 60.8.

D.1.3 Carbon Monoxide (CO) Emission Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements), each steam generating unit shall comply with the following:

(1) During normal operation (50 percent load or more), the CO emissions from each combustion turbine stack shall not exceed 0.016 pounds per MMBtu, which is equivalent to 28.0 pounds CO per hour.

(2) During normal operation (50 percent load or more), the CO emissions from each combustion turbine stack, when its associated duct burner is operating, shall not exceed 0.037 pounds per MMBtu, which is equivalent to 93.7 pounds CO per hour.

(3) During periods of startups or shutdowns (less than 50 percent load), the CO emissions from each combustion turbine stack shall not exceed 110 ppmvd at 15 percent oxygen. The startup or shutdown period shall not exceed two (2) hours. The duct burners shall not be operated until normal operation begins.

(4) Good combustion practices shall be applied to minimize CO emissions.

D.1.4 Sulfur Dioxide (SO_2) Emission Limitations

(a) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Da (NSPS for Electric Utility Steam Generating Units), each duct burner shall not exceed 0.20 pounds SO_2 per MMBtu heat input, determined on a 30-day rolling average basis.

(b) Pursuant to 326 IAC 12 and 40 CFR 60, Subpart GG (NSPS for Stationary Gas Turbines), each combustion turbine shall not exceed 0.015 volume percent SO_2 at 15 percent oxygen (dry basis) and the natural gas fuel shall not exceed 0.8 percent sulfur by weight.

(c) Pursuant to 326 IAC 7-1.1-2 (SO_2 Emission Limitations), each combustion turbine and its associated duct burner shall not exceed 6.0 pounds SO_2 per MMBtu.

(d) To avoid the requirements of 326 IAC 2-3 (Emission Offset Rules), the total SO_2 emissions from the combustion turbines and duct burners combined shall not exceed 22.8 pounds SO_2 per hour. This limitation shall satisfy the requirements of 326 IAC 12 and 326 IAC 7-1.1-2.

D.1.5 Volatile Organic Compound (VOC) Emission Limitations

(a) Pursuant to 326 IAC 8-1-6 (VOC BACT Requirements) and 326 IAC 2-3 (Emission Offset Requirements), the following requirements must be met:

(1) The VOC emissions from each combustion turbine stack shall not exceed 0.0016 pounds per MMBtu which is equivalent to 2.8 pounds VOC per hour.

(2) The VOC emissions from each combustion turbine stack, when its associated duct burner is operating, shall not exceed 0.0046 pounds per MMBtu which is equivalent to 11.8 pounds VOC per hour.

(3) Good combustion practices shall be implemented to minimize VOC emissions.

D.1.6 Emission Reduction Credits

Pursuant to 326 IAC 2-3-1(j) and 326 IAC 2-3-3(a)(5), the source must offset ozone (VOC and NO_X) emissions in accordance with the following:

(a) The total VOC emission offsets required as a result of this project is 90.4 tons per year. The emission reduction credits shall be obtained from shutdown of the Lubes Unit at BP Amoco Oil (089-00003). If other emission reduction credits are relied upon after issuance of this permit, this permit must be amended to identify and validate those emission reduction credits. All emission reduction credits must be validated by OAM and creditable prior to startup of the source.

(b) The total NO_X emission offsets required as a result of this project is 341 tons per year. The emission reduction credits shall be obtained from shutdown of the 76" Hot Strip Mill at Ispat Inland, Inc. (089-00316). If other emission reduction credits are relied upon after issuance of this permit, this permit must be amended to identify and validate those emission reduction credits. All emission reduction credits must be validated by OAM and creditable prior to startup of the source.

D.1.7 Formaldehyde Limitations

Pursuant to 326 IAC 2-1.1-5 (Air Quality Requirements), the formaldehyde emissions from each combustion turbine stack shall not exceed 0.0005 pounds of formaldehyde per MMBtu. The combined emissions from each combustion turbine stack shall not exceed 10 tons per year.

D.1.8 Ammonia Limitations

Pursuant to 326 IAC 2-1.1-5 (Air Quality Requirements), the ammonia emissions from each combustion turbine stack shall not exceed 10 ppm.

D.1.9 Annual Emission Limitations

Pursuant to 326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset Requirements), the annual source emissions, including startup and shutdown operations, shall not exceed 262 tons of NOx per year and 571 tons of CO per year, based on a 12 consecutive month period.

D.1.10 Operation Limitations

(a) Pursuant to 326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset Requirements), the combined natural gas fuel usage from the duct burners shall not exceed 8,052 MMSCF per year, based on a 12 consecutive month period. This limitation shall also demonstrate that PM10 is not subject to 326 IAC 2-3 (Emission Offset Requirements).

(b) Pursuant to 326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset Requirements), each combustion turbine shall not exceed a heat input rate of 1735 MMBtu per hour, determined on a 30-day rolling average basis. This averaging time shall only account for those periods that the combustion turbine is in operation.

D.1.11 New Source Performance Standards

The combustion turbines and duct burners shall comply with the provisions of 40 CFR 60, Subpart A (General Provisions), 40 CFR 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units), and 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) which are incorporated by reference in 326 IAC 12-1.

D.1.12 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for each combustion turbine and its control device.

Compliance Determination and Monitoring:

D.1.13 Performance Testing

(a) Pursuant to 326 IAC 2-1.1-11, 326 IAC 2-2, 326 IAC 2-3, and 326 IAC 12, the following compliance stack tests for each combustion turbine stack shall be performed within 60 days of commercial operation, as defined in Condition C.5, but no later than 180 days after initial start-up:

(1) Combustion Turbines (Normal Operation - 50 percent load or more) - PM, opacity, and VOC emission limits established in D.1.1(a), (c)(1), (d), (e)(1) and D.1.5(a)(1) shall be demonstrated for each combustion turbine at maximum load;

(2) Combustion Turbines (Normal Operation - 50 percent load or more) - NOx and CO emission limits of D.1.2(a)(1) and D.1.3(a) shall be demonstrated at four points in the normal operating range of each combustion turbine, including the minimum point in the range and peak load;

(3) Combustion Turbines (Cold Startup Operation - less than 50 percent load) - NOx and CO emission limits of D.1.2(a)(3) and D.1.3(a)(3) shall be demonstrated for each combustion turbine during startup mode; and

(5) Combustion Turbines and Duct Burners (Normal Operation - 50 percent load or more) - PM, PM_{10}, opacity, NOx, CO, VOC, formaldehyde and ammonia emission limits established in D.1.1(b), (c)(2), (d), (e)(2), (f)(1), D.1.2(a)(2), D.1.3(b), D.1.5(a)(2), D.1.7 and D.1.8 shall be demonstrated for each combustion turbine at maximum load when its associated duct burners are in operation.

(b) Pursuant to 326 IAC 3-5, the Permittee shall conduct performance tests on each combustion turbine stack to certify the continuous emission monitoring (CEM) systems for NOx.

(c) A certified CEM system may be used in lieu of a compliance stack test.

(d) EPA Method 9 opacity tests shall be performed concurrently with the PM and PM_{10} compliance tests, unless meteorological conditions require rescheduling the opacity tests to another date.

(e) IDEM, OAM retains the authority under 326 IAC 2-1-4(f) to require the Permittee to perform additional and future compliance testing as necessary.

D.1.14 Continuous Emission Monitoring

(a) Pursuant to 326 IAC 2-2, 326 IAC 2-3, 326 IAC 3-5, and 326 IAC 12, the Permittee shall continuously monitor and record the following parameters from each combustion turbine stack to demonstrate compliance with the limitations and operation standards required by Operation Conditions D.1.2:

(1) nitrogen oxide concentration; and

(2) oxygen concentration.

(b) The continuous monitoring systems shall be installed and operational prior to conducting the performance tests. A monitoring protocol shall be performed in accordance with the applicable procedures under 40 CFR 60, Appendix B, Performance Specification 1 and 326 IAC 3-5 and shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within 60 days of commercial operation, as defined in Condition C.5, but no later than 180 days after initial startup. Verification of operational status shall, as a minimum, include completion of the manufacturer written requirements or recommendations for installation, operation, and calibration of the device.

D.1.15 Natural Gas Monitoring

(a) The Permittee will be burning only pipeline quality natural gas. Therefore, the Permittee shall be able to demonstrate compliance with Operation Conditions D.1.4(a) thru (c)by monitoring the naturel gas specifications in 40 CFR60.333(b) on a custom fuel monitoring schedule as follows:

(1) Monitoring of the nitrogen content will not be required since pipeline natural gas is the only fuel fired in each turbine.

(2) Measurement of the sulfur content of the pipeline natural gas will be conducted by manual sampling followed by analysis. Sulfur content will be determined via any of the following American Society for Testing Materials (ASTM) methods: ASTM D1072-90, ASTM D4084-94, ASTM D4468-85, ASTM D5504-94, ASTM D3246-81. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio)may be used, subject to the approval of the Administrator.

(3) Initial samples must be collected and analyzed twice a month for six months. If six months of bi-monthly sampling and analysis indicate that the sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to quarterly monitoring.

(4) If six quarters of quarterly sampling and analysis indicate sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to semi-annual monitoring.

(5) If any analysis indicate noncompliance with the applicable sulfur limit of 0.8 weight percent in 40CFR Section 60.333(b), samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined. The Permittee

will notify OAQ and U.S. EPA of the exceedance in accordance with 40 CFR Section 60.7(c).

(6) If there is a substantial change in fuel quality, samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined.

(7) Records of sample analyses and fuel supply information related to sulfur content of the fuel will be retained for a least three years and shall be available for inspection upon request.

(b) The Permittee shall monitor the following parameters for natural gas on a calendar month basis, unless otherwise specified in 40 CFR 60.334(b), to demonstrate compliance with Operation Conditions D.1.2(f)(2), D.1.3(a), D.1.5(a), and D.1.10:

(1) hourly natural gas flowrate to each combustion turbine and duct burner;

(2) heat content;

(3) natural gas fuel consumption; and

Recordkeeping and Reporting Requirements:

D.1.16 Recordkeeping Requirement

The Permittee shall maintain records of the parameters stated in Operation Conditions D.1.6, D.1.10, D.1.13, D.1.14, and D.1.15 to demonstrate compliance with Operation Conditions D.1.1, D.1.2, D.1.3, D.1.4, D.1.5, D.1.7, D.1.8, and D.1.9.

D.1.17 Reporting Requirement

The Permittee shall submit the following information on a quarterly basis:

(a) records of excess NOx emissions (defined in 326 IAC 3-5-7) from the continuous emissions monitoring system for each parameter described in Operation Condition D.1.14 to demonstrate compliance with Operation Condition D.1.2;

(b) records of excess SO_2 emissions (defined in 40 CFR 60.334(c)(2)) for the parameter described in Operation Condition D.1.15(b) to demonstrate compliance with Operation Condition D.1.4(b);

(c) monthly natural gas fuel usage records as required by Operation Condition D.1.15(d) to demonstrate compliance with Operation Condition D.1.1(f)(2) and D.1.10; and

(d) daily records of the annual NOx and CO emission records as required by Operation Condition D.1.9 to demonstrate compliance with Operation Condition D.1.6 and PSD and Emission Offset Requirements pursuant to 326 IAC 2-2 and 326 IAC 2-3, respectively.

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ?_____, 100 LBS/HR VOC ?_____, 100 LBS/HR SULFUR DIOXIDE ?_____ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ?_____ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL*SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
MALFUNCTION REPORTED BY: _____TITLE:_____
(SIGNATURE IF FAXED)
MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

REV 3/96 FAX NUMBER - 317 233-5967 *SEE REVERSE

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO2, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown. If this item is checked on the front, please explain rationale:

_____
_____
_____

Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section
Quarterly Report

Company Name: Whiting Clean Energy, Inc.
Location: 2155 Standard Avenue, Whiting, Indiana 46394
Permit No.: CP 089-11194-00449
Source/Facility: Duct Burner 1 and Duct Burner 2
Limits: 8,052 MMSCF per year, based on a 12 consecutive month period

YEAR: _____

Month	Facility	Fuel Usage this Month, MMSCF	Fuel Usage Last 12 Months, MMSCF	Fuel Usage Limit, MMSCF/12 consecutive month period
	Duct Burners 1 + 2			8052
	Duct Burners 1 + 2			8052
	Duct Burners 1 + 2			8052

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section
Quarterly Report

Company Name: Whiting Clean Energy, Inc.
Location: 2155 Standard Avenue, Whiting, Indiana 46394
Permit No.: CP 089-11194-00449
Source/Facility: Combustion Turbines and Duct Burners
Limits: 262 tons NOx per year, based on a 12 consecutive month period and 571 tons CO per year, based on a 12 consecutive month period

YEAR: _____

Month	Facility*	Pollutant	Emissions this Month, tons	Annual Emissions Last 12 Months, tons	Emmission Limit, tons/12 consecutive month period
	Combustion Turbines and Duct Burners	NOx			262
		CO			571
	Combustion Turbines and Duct Burners	NOx			262
		CO			571
	Combustion Turbines and Duct Burners	NOx			262
		CO			571

* This limitation includes startup, shutdown and normal operations. Emissions from startup and shutdown operations shall be determined by multiplying the ppm data collected from a compliance stack test or CEM system by the maximum theoretical flow rate for startup and shutdown operations.

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Permit Revision to a Prevention of Significant Deterioration Permit

Source Description and Amendment Request

Source Name:	Whiting Clean Energy, Inc
Source Location:	2155 Standard Avenue, Whiting, Indiana 4639
County:	Lake
SIC Code:	4911
Operation Permit No.:	089-11194-00449
Operation Permit Issuance Date:	July 20, 2000
Minor Permit Revision No:	CP-089-15985-00449
Permit Reviewer:	Walter Habeeb

On May 14, 2002, the Office of Air Quality (OAQ) received a request from Whiting Clean Energy, Inc. for a modification to CP-089-11194-00449. The modification was to incorporate the response of the United States Environmental Protection Agency (U.S. EPA), in the request of the Permittee to use alternative monitoring requirements's under the New Source Performance Standards (NSPS) Subpart Da and approval of alternative sulfur monitoring requirements under the NSPS Subpart GG for this facility.

There are no emissions increases due to this modification and the existing permit allows an alternate fuel monitoring schedule under 40 CFR 60.334 (b). Therefore, a PSD review will not be required and this modification has been processed as a Minor Permit Modification.

Proposed Changes
Sections D.1.2 (Nitrogen Oxide) and D.1.15 (Natural Gas Monitoring) of the Permit have been modified to reflect the above agreed upon changes to the Permit (bolded has been added and strikeout has been omitted).

D.1.2 (Nitrogen Oxide)

(d) The Permittee may use NOx CEM data to demonstrate compliance with 40 CFR Part 60, Subpart Da, and (a) and (c) of this Section. The performance test for the NOx CEM must be taken after startup, as required under 40 CFR60.8, not during startup.

(e) To demonstrate compliance with (b) of this Section, the Permittee shall use continuous fuel flowmeters following the appropriate measurement procedures specified in Appendix D to Part 75. The hourly NOx mass rate will be calculated by equation three (3) of 40 CFR60.46a (k)(2)(iv).

(1) The compliance provision under 40 CFR60.46a(k)(3) requires measurement of NOx emissions at a point where emissions from the Duct Burners combine with the emissions from the Combustion Turbines, connected to a stack. This will allow measurement of NOx from the entire system.

(2) The equation in Appendix D to Part 72 shall be used to calculate the actual gross electrical output, using the actual heat input instead of the maximum design heat input. The hourly emissions (lb/hr) from the NOx CEM will be

divided by the actual gross electrical output to yield values in terms of the standard (lb NOx/Mwh). The performance test for the NOx CEM must be conducted after startup, as required under 40 CFR Section 60.8.

D.1.15 (Natural Gas Monitoring)

~~Upon commercial operation, as defined in Condition C.5, the Permittee shall monitor the following parameters for natural gas on a calendar month basis, unless otherwise specified in 40 CFR 60.334(b), to demonstrate compliance with Operation Conditions D.1.2(b) and (f)(2), D.1.3(a), D.1.4(a) and (c), D.1.5(a) and D.1.10~~:

(a) The Permittee shall burn pipeline quality natural gas only. The Permittee shall demonstrate compliance with Operation Conditions D.1.4 (a) thru (c) by monitoring the natural gas per specifications in 40 CFR60.334(b) on a custom fuel monitoring schedule as follows:

(1) Monitoring of the nitrogen content will not be required since pipeline natural gas is the only fuel fired in each turbine.

(2) Measurement of the sulfur content of the pipeline natural gas will be conducted by manual sampling followed by analysis. Sulfur content will be determined via any of the following American Society for Testing Materials (ASTM) methods: ASTM D1072-90, ASTM D4084-94, ASTM D4468-85, ASTM D5504-94, ASTM D3246-81. The applicable ranges of some ASTM methods are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio)may be used, subject to the approval of the Administrator.

(3) Initial samples must be collected and analyzed twice a month for six months. If six months of bi-monthly sampling and analysis indicate that the sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to quarterly monitoring.

(4) If six quarters of quarterly sampling and analysis indicate sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to semi-annual monitoring.

(5) If any analysis indicate noncompliance with the applicable sulfur limit of 0.8 weight percent in 40CFR Section 60.333(b), samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined. The Permittee will notify OAQ and U.S. EPA of the exceedances in accordance with 40 CFR Section 60.7(c).

(6) If there is a substantial change in fuel quality, samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined.

(7) Records of sample analyses and fuel supply information related to sulfur content of the fuel shall be retained for a least three years and shall be available for inspection upon request.

(b) The Permittee shall monitor the following parameters for natural gas on a calendar month basis, unless otherwise specified in 40 CFR 60.334(b), to demonstrate compliance with Operation Conditions D.1.2(f)(2), D.1.3(a), D.1.5(a), and D.1.10:

~~(a)~~ **(1)** hourly natural gas flowrate to each combustion turbine and duct burner;

~~(b) average sulfur content;~~

~~(c)~~ **(2)** heat content;

~~(d)~~ **(3)** natural gas fuel consumption; and

~~(e) sulfur dioxide emissions rate in pounds per million Btu.~~